



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,752	02/13/2002	Kieth G. Spitler	Mo6806/MD-99-39B-PU	9963
157	7590	05/17/2006	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			COONEY, JOHN M	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

Applicant(s)

10/074,752

SPITLER ET AL.

Examiner

Art Unit

John m. Cooney

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-9 and 11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1711

Applicant's arguments filed 2-28-06 have been fully considered but they are not persuasive.

The following are set forth or maintained in light of applicants' amendments and reply:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1,4-9 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants' claims recite ranges of amount values for the microsphere and mixture (A) components that are not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants' supporting disclosure only recites support for the particular value points indicated in the examples for the specific compositions of the examples, but do not provide support for the range values now claimed for the range of compositional make-ups defined by the claims. This is a new matter rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP-0,005,903 in view of Plummer et al.(6,284,809).

EP-0,005,903 discloses methods for preparing cellular polyurea compositions by mixing isocyanates having functionality and isocyanate group content values as claimed and water in stoichiometric excess quantities as claimed wherein the disclosed reactive mixtures may be combined with additives inclusive of fillers and other materials and are employed in applications inclusive of molding applications as claimed and applications including heating the mixtures (see page 3 line 8 – page 4 line 9, page 8 lines 27 et seq., page 10 line 14 – page 11 line 6, and the examples, as well as, the entire document).

EP-0,005,903 differs from the claims in that inorganic, hollow, glass microspheres are not exemplified as being useable additives. However, Plummer et al. discloses the usefulness of the employment of inorganic, hollow, glass microspheres in the making of resin composites inclusive of polyurea composites for the purpose of providing strong, buoyant, insulation materials (see column 1 in its entirety, column 2 lines 28-43, and column 3 lines 9-14 and 63-65, as well as, the entire document).

Accordingly, it would have been obvious for one having ordinary skill in the art to have

Art Unit: 1711

employed the glass microspheres disclosed by Plummer et al. as additives in the preparations of EP-0,005,903 for the purpose of imparting their strength and insulation effects in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

EP-0,005,903 differs from the claims in specifics of its heating operations and catalyst utilization in that emphasis is made on the employment of catalyst rather than heating to move the reactions forward. However, it is well known and obvious to substitute heating for catalysts, and, conversely, catalysts for heating in controlling reaction rates. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed heating in the alternative to the additional presence of catalysts within the processes of EP-0,005,903 for the purpose of achieving their respective reaction inducing effects in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. EP-0,005,903 discloses an advance in the art by employing the benefits of catalyst to aid in the moving of the reactions to completion with benefits of energy expense being obtained. If one were to rely upon heating the starting materials to move the reactions of the instant concern to completion, then the use of energy saving catalyst would no longer be necessary.

EP-0,005,903's difference in the inclusion of flame retardants, additionally, does not rise to the level of patentable distinction for the instant claims. If one were not interested in the flame retardancy of their obtained articles, then they would have excluded their employment with the expected loss of flame retardant effect.

Art Unit: 1711

Accordingly, it would have been obvious for one having ordinary skill in the art to have excluded fire retardants from the preparations of EP-0,005,903 with the consequential loss of fire retardant effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Applicants' arguments have been considered in light of the amendments to the claims. However, rejection is maintained for the reasons set forth above. Plummer et al. is looked to for its disclosure of the usefulness of glass microspheres in the applications of the instant concern and that it additionally employs other materials in its teaching such as microspheres does not negate what it is being looked to in remedying the deficiencies of EP-0,005,903. As to the weight values now recited by applicants' claims, it is held that, normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find *workable* conditions generally involves no more than the application of routine skill in the art of chemical engineering. *In re Aller* 105 USPQ 233. Similarly, the determination of *optimal* values within a disclosed range is generally considered obvious. *In re Boesch* 205 USPQ 215. This is the case here, and without a showing of new or unexpected results commensurate in scope with the scope of the claims, rejection, as set forth above, is maintained.

Art Unit: 1711


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JOHN M. COONEY, JR.
PRIMARY EXAMINER
Group 1700